AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Claim 1 (previously presented): A nucleotide or polynucleotide sequence deleted from the genomes of *M. bovis* BCG, *M. bovis*, and *M. microti* OV254, and present in the genome of *M. tuberculosis*.

Claim 2 (previously presented): The nucleotide or polynucleotide sequence according to claim 1, wherein the nucleotide or polynucleotide sequence is present in nucleotide region RD5, RD6, RD7, RD8, RD9, or RD10.

Claim 3 (previously presented): A method for discriminating *M. bovis* BCG, *M. bovis*, or *M. microti* OV254, from *M. tuberculosis* in a biological sample, the method comprising:

(A) isolating DNA from the biological sample or producing cDNA from RNA of the biological sample; and

(B) analyzing said DNA or cDNA sequences with the nucleotide or polynucleotide sequence as claimed in claim 1.

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Claim 4 (previously presented): The method as claimed in claim 3, wherein the analysis of the DNA or cDNA sequences is carried out using nucleotide sequences complementary to said DNA or cDNA sequences.

Claim 5 (previously presented): The method as claimed in claim 3, wherein the analysis of the DNA or cDNA sequences is carried out by amplifying the sequences using primers.

Claim 6 (previously presented): The method as claimed in claim 5, wherein the primers have a nucleotide sequence chosen from the group comprising SEQ ID No. 1, SEQ ID No. 2, SEQ ID No. 3, SEQ ID No. 4, SEQ ID No. 5, SEQ ID No. 6, SEQ ID No. 7, SEQ ID No. 8, SEQ ID No. 9, SEQ ID No. 10, SEQ ID No. 11, SEQ ID No. 12, SEQ ID No. 13, and SEQ ID No. 14, and wherein:

(A) the pair SEQ ID No. 1/SEQ ID No. 2 is specific for RD4;

(B) the pair SEQ ID No. 3/SEQ ID No. 4 is specific for RD5;

(C) the pair SEQ ID No. 5/SEQ ID No. 6 is specific for RD6;

(D) the pair SEQ ID No. 7/SEQ ID No. 8 is specific for RD7;

(E) the pair SEQ ID No. 9/SEQ ID No. 10 is specific for RD8;

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(F) the pair SEQ ID No. 11/SEQ ID No. 12 is specific for RD9; and

(G) the pair SEQ ID No. 13/SEQ ID No. 14 is specific for RD10.

Claim 7 (cancelled).

Claim 8 (previously presented): A method for discriminating *M. bovis* BCG, *M. bovis*, or *M. microti* OV254, from *M. tuberculosis* in a biological sample, wherein the method comprises:

(A) bringing the biological sample into contact with at least one pair of primers as defined in claim 6;

(B) amplifying the DNA of the mycobacterium; and

(C) visualizing the amplified DNA fragments.

Claim 9 (previously presented): A kit for discriminating *M. bovis* BCG, *M. bovis*, or *M. microti* OV254, from *M. tuberculosis* in a biological sample, wherein the kit comprises:

(A) at least one pair of primers as defined in claim 6;

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(B) reagents necessary to carry out a DNA amplification reaction; and

(C) components to characterize the amplified fragment by size and/or sequence.

Claim 10 (previously presented): A method of amplifying a DNA sequence from *M. bovis* BCG, *M. bovis*, *M. microti* OV254, or *M. tuberculosis*, wherein the method comprises hybridizing at least one pair of primers of claim 6 to the DNA sequence.

Claims 11-33 (cancelled).

Claim 34 (previously presented): The nucleotide or polynucleotide sequence according to claim 1, wherein the nucleotide or polynucleotide sequence is present in nucleotide region RD5.

Claim 35 (previously presented): The nucleotide or polynucleotide sequence according to claim 1, wherein the nucleotide or polynucleotide sequence is present in nucleotide region RD6.

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Claim 36 (previously presented): The nucleotide or polynucleotide sequence according to claim 1, wherein the nucleotide or polynucleotide sequence is present in nucleotide region RD7.

Claim 37 (previously presented): The nucleotide or polynucleotide sequence according to claim 1, wherein the nucleotide or polynucleotide sequence is present in nucleotide region RD8.

Claim 38 (previously presented): The nucleotide or polynucleotide sequence according to claim 1, wherein the nucleotide or polynucleotide sequence is present in nucleotide region RD9.

Claim 39 (previously presented): The nucleotide or polynucleotide sequence according to claim 1, wherein the nucleotide or polynucleotide sequence is present in nucleotide region RD10.

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Claim 40 (presently amended): The nucleotide or polynucleotide sequence according to claim 1, wherein the nucleotide or polynucleotide sequence is present in an ORF or gene selected from:

(A) Rv2346c, Rv2347c, Rv2348c, *plcC*, *plcB*, *plcA*, Rv2352c, or Rv2353c, of nucleotide region RD5[[,]];

(B) Rv3425, Rv3426, Rv3427c, or Rv3428c, of nucleotide region RD6[[,]];

(C) Rv1964, Rv1965, *mce3*, Rv1967, Rv1968, Rv1969, *lprM*, Rv1971, Rv1972, Rv1973, Rv1974, Rv1975, Rv1976c, or Rv1977, of nucleotide region RD7[[,]];

(D) *ephA*, Rv3618, Rv3619c, Rv3620c, Rv3621c, Rv3622c, or *lpqG*, of nucleotide region RD8[[,]];

(E) *cobL*, Rv2073c, Rv2074, or Rv2075c, of nucleotide region RD9[[,]]; or

(F) *echAl* or Rv0223c, of nucleotide region RD10.

Claim 41 (cancelled).

Claim 42 (previously presented): A product of expression of all or a part of an ORF or gene of claim 40.

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Claim 43 (previously presented): A method for discriminating a vaccination with *M. bovis BCG*, *M. bovis*, or *M. microti* OV254 from an infection by *M. tuberculosis* in a mammal, wherein the method comprises:

(A) preparing a biological sample containing cells of the mammal,

(B) incubating the biological sample with at least one product as defined in claim 42, and,

(C) detecting synthesis of protein.

Claim 44 (new): An *in vitro* method for discriminating antibodies directed against *M. bovis* BCG, *M. bovis*, or *M. microti* OV254, from antibodies directed against *M. tuberculosis* in a biological sample, wherein the method comprises:

(A) bringing the biological sample into contact with at least one product as defined in claim 42, and

(B) detecting the antigen-antibody complex formed.

Claim 45 (new): A method for discriminating a vaccination with *M. bovis BCG*, *M. bovis*, or *M. microti* OV254 from an infection by *M. tuberculosis* in a mammal, wherein the method comprises:

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(A) preparing a biological sample containing cells of the mammal;

(B) incubating the biological sample with at least one product as defined in claim 42; and

(C) detecting a cellular reaction indicating prior sensitization of the mammal to said product.

Claim 46 (new): A kit for the *in vitro* diagnosis of an *M. tuberculosis* infection in a mammal optionally vaccinated beforehand with *M. bovis* BCG comprising:

(A) a product as defined in claim 42;

(B) where appropriate, reagents for the constitution of the medium suitable for the immunological reaction;

(C) reagents allowing the detection of the antigen-antibody complexes produced by the immunological reaction;

(D) where appropriate, a reference biological sample (negative control) free of antibodies recognized by said product; and

(E) where appropriate, a reference biological sample (positive control) containing a predetermined quantity of antibodies recognized by said product.

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Claim 47 (new): A mono- or polyclonal antibody, or its chimeric fragments or antibodies, wherein the antibodies or fragments are capable of specifically recognizing a product as defined in claim 42.

Claim 48 (new): A method for discriminating an antigen of *M. bovis* BCG, *M. bovis*, or *M. microti* OV254 from an antigen of *M. tuberculosis* in a biological sample, wherein the method comprises:

(A) bringing the biological sample into contact with an antibody as claimed in claim 47; and

(B) detecting the antigen-antibody complex formed.

Claim 49 (new): A kit for discriminating the presence of an antigen of *M. bovis* BCG, *M. bovis*, or *M. microti* OV254 from an antigen of *M. tuberculosis* in a biological sample, wherein the kit comprises:

(A) an antibody as claimed in claim 47;

(B) reagents for constituting the medium suitable for the immunological reaction; and

(C) reagents allowing the detection of the antigen-antibody complexes produced by the immunological reaction.

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Claim 50 (new): An immunological composition, comprising at least one product as defined in claim 42, and a pharmaceutically compatible vehicle.

Claim 51 (new): The vaccine of claim 50, further comprising one or more immunity adjuvants.

Claim 52 (new): The method of claim 45, wherein the cellular reaction detected is synthesis of gamma-interferon.

Claim 53 (new): The method of claim 45, wherein the biological sample containing cells is a sample of cells of the immune system.

Claim 54 (new): The method of claim 45, wherein the cellular reaction detected is cellular proliferation.

Claim 55 (new): The method of claim 43, wherein the protein synthesized is gamma interferon.

Claim 56 (new): The method of claim 45, further comprising detecting protein synthesis.

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Claim 57 (new): The method as claimed in claim 56, wherein the protein synthesis is gamma interferon protein synthesis.

Claim 58 (new): The method of claim 53, wherein the cells of the immune system are T cells.

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